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LEO STOECKER FROM ACME

DESERT ARABS AND JEWISH SETTLER (center) EAT A FRIENDLY MEAL TOGETHER IN CROWDED ISRAEL
(Bulletin No. 5)

Bulletin No. 1, November 19, 1951

Soviet Atomic Center Reported in Sinkiang

BEHIND the highest mountain curtain in the world, rimmed by the wildest deserts, Russia is reported building a communist atomic outpost inside Red China's border province—Sinkiang.

Ever since uranium was "discovered" in this remote region—"farther than any country from the sea"—Russian activity has been more and more the subject of shadowy reports drifting across the Himalayas. Late dispatches indicate that the Takla Makan, a vast desert within the province, may be the proving ground for Soviet atom-bomb tests.

New Development for Tribal Peoples

In addition to persistent rumors of uranium being mined, travelers report many strategic materials—tungsten, wolfram, gold, copper, molybdenum, zinc, coal, and oil. Russian technicians with Russian machinery are said to be carving underground hangars for radar-screened airfields. A railroad—Sinkiang's first—is being built. An "atomic-bomb plant," say Chinese nationalists, is under construction in Kuldja, caravan city 180 air miles east of Russia's Turksib (Turkistan-Siberia) Railway.

This sort of development would be an industrial revolution to the polyglot people of Sinkiang. Certain groups farm desert oases, occasional river valleys, and mountain watersheds. Fierce nomadic tribes on northern steppes tend herds and carry on trade and ancient crafts.

Sinkiang, although the name means "new frontier," or "new dominion," is a land that has been in the backwash of history. Believed to be the seat of ancient Aryan races, its life has changed little since plodding caravans followed the great silk roads across inner Asia to Marco Polo's Cathay.

Walled off from Tibet to the south by the Kunlun range, from Jammu and Kashmir by the Karakorams, from Afghanistan's Wakhan corridor and Russia by the Pamirs and Tien Shan, from China proper by 1,000 miles of dusty desert crossed by few roads, its lonely reaches have nevertheless been a traffic crossroads, an inland meeting ground between China, India, and the Soviet Union.

Asia's Driest Desert

Its trading towns include the capital, Urumchi (Tihwa), where the United States had its remotest consulate until 1949, Kashgar, Yarkand, Khotan, Aqsu, Qomul, Kuldja, and Qara Shahr (illustration, inside cover). In them mingle Turki tribesmen of Moslem faith, Chinese, Mongols, White Russians, Manchus, Tajiks, and Tibetans. Their dusty domain is no dwarf. Within Sinkiang's borders, Texas could be put twice.

The Tien Shan (Heavenly Mountains) split the country. The snow-covered range separates Asia's driest desert, the Takla Makan, on the south, from the northern Dzungari basin approaches to Mongolia and Siberia. South of Kuldja, heart of the Ili River region of Sinkiang, lies the mountain-walled Tekes Valley, one of the most famous nomad para-

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HORSES AND DONKEYS ARE MOTIVE POWER IN QARA SHAHR

Coarse brooms for outdoor sweeping will be made from the brush the donkeys carry. On horses, the people of Sinkiang (Bulletin No. 1) travel speedily from town to town. They also use camels.

Walled towns are the rule in a country that has known conquerors from without and plundering bands from within. Massive gates are fortified in time of trouble.

Sinkiang nominally belongs to China. Now that China is dominated by communists, reports are leaking out to the effect that Russia is taking over the huge border province in mid-Asia. Uranium is the lure.

Uranium mining, atomic plants, and atom-bomb tests may be bringing drastic changes to the life of this remote land.

Sinkiang is sometimes known as China's "Wild West." It comprises part of a general area called Turkistan. This region, also spelled Turkestan, spills over into the Soviet Union and Afghanistan.

MORDEN-CLARK ASIATIC EXPEDITION

Bulletin No. 2, November 19, 1951

GI's Debark at Leghorn, Italy's No. 3 Port

THE new United States supply base at Leghorn (Livorno), Italy, where 1,200 American troops recently landed, is picking up where it broke off four years ago.

At that time the port was the "exit" for the last of the homeward-bound United States forces stationed in Italy during and after the war.

Today, as in 1947, geography helped dictate the use of Leghorn—Livorno is the Italian name—as a convenient distribution point.

Ranked after Naples and Genoa

Leghorn has one of the best harbors of the Italian peninsula. It is somewhat nearer than Germany's North Sea ports to the American occupation zone in Austria, destination of most of the troops lately landed.

Leghorn was considered a valuable prize when it was captured by the Allies in July, 1944. The port ranked after Naples and Genoa, with a daily shipping capacity of 17,500 tons.

Allied bombs and destruction by retreating Germans all but demolished the city and its port facilities. So complete was the devastation that incoming American engineers found it simpler to build a new port near by than to repair the old one. Of Leghorn's 125,000 prewar inhabitants, only about 20,000 remained in the gutted town.

By 1949, the city's population had passed the old mark and reached nearly 145,000. Although American soldiers going back to Leghorn find the city still battered, and base officers complain that its silt-laden channel needs dredging to accommodate large ships, activities at the port are booming.

The city's extensive shipbuilding has been resumed. Leghorn is Italy's Annapolis and the naval academy is again training officers within the treaty limitations on the size of the Italian Navy.

Flourished under the Medici Dukes

Canal-laced Leghorn has been primarily a commercial center through the centuries. First mentioned in the ninth century, the city came into prominence and prosperity in the late Middle Ages. It was then a free port—the first such port on the Mediterranean.

Under the dukes of Tuscany (of the famous Medici family), who built it up and fortified it, Leghorn gained an international atmosphere which still persists. The city invited there "men of East and West, Spaniards, and Portuguese, Greeks, Germans, Italians, Hebrews, Turks, Armenians, and Persians."

The temperate climate and moderate rainfall of Tuscany encourages agriculture, and from Leghorn are shipped olive oil and wine from its vineyards, and candied fruits from its orchards. Carrara's quarries, a few miles north of Leghorn in the Apennines, contribute to the export list the famous white marble which was used by Michelangelo, in the 15th and 16th centuries, by Canova, in the 18th and 19th, and by the finest sculptors of today.

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dises in the world. Moslems inhabit this valley (illustration, below).

Sinkiang, known also as Chinese Turkistan, has long offered scientists and explorers all the excitement of a giant grab bag. Ruins of ancient cities lie buried under the sand seas, and traces of trails still are found where they were worn by migrating prehistoric races.

Claimed by China for 2,000 years but controlled intermittently for only about 500, Sinkiang actually has been a nearly independent province. War lords and tribal chiefs have long ruled its people, more than 90 per cent of whom are non-Chinese, speaking more than a dozen dialects.

In the 1930's, falling under the rule of a Russian-befriended military adventurer named Sheng Shih-ts'ai, the province was widely prospected by Soviet geologists. They proved it to be China's richest region in strategic minerals and petroleum. Five-year plans, Soviet "trade agencies," telegraph and radio communications, and a Russian-controlled airline had been set up by World War II.

NOTE: Sinkiang may be located on the National Geographic Society's map of China. Write the Society's headquarters, Washington 6, D. C., for a price list of maps.

For additional information, see "The Caves of the Thousand Buddhas," in the *National Geographic Magazine* for March, 1951; "With the Nomads of Central Asia," January, 1936; "From the Mediterranean to the Yellow Sea by Motor," November, 1932; "First Over the Roof of the World by Motor," March, 1932; "The Desert Road to Turkestan," June, 1929; and "By Coolie and Caravan Across Central Asia," October, 1927. *(Back issues of the Magazine may be obtained from the Society's headquarters at 60¢ a copy, 1946 to the present date; $1.00 from 1930 through 1945; and $2.00 from 1912 through 1929. Earlier issues, when available, at varied prices.)*

EDWARD MURRAY

A MOSLEM CHIEFTAIN OF SINKIANG BREAKS BREAD WITH HIS FAMILY

These nomads of the Tekes Valley, in the far-inland Chinese province, live in a yurt, a home of felt stretched over a light framework and staked down like a tent. When housecleaning time comes, they simply move the yurt to a new location. A carpet makes the floor; another serves as table. Russian-style samovar heats water for tea. Manufactured spoons are used. Thick quilts piled behind the diners make beds at night.

Bulletin No. 3, November 19, 1951

1951 Broke National Park Attendance Record

UNITED STATES rangers have closed their books on the greatest travel year in the history of America's national parks.

From Maine to Alaska and Hawaii, more than 36,700,000 people—one in every four Americans—visited historic shrines and saw majestic scenery that they themselves own as part of the far-flung national park system. The figure broke the 1950 record by nearly 4,000,000.

Yellowstone Is Largest

Uncle Sam's public park domain—mountains and monuments, canyons and caves—embraces more land than the combined areas of Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, Delaware, and half of New Jersey. Half of the total is in 28 national parks; the remainder in 175 national monuments, historical sites, battlefields, and memorials. All are administered by the National Park Service. The Forest Service supervises the National Forests, ten times as extensive.

Yellowstone is the largest national park. A fantastic land of geysers, hot springs, mud volcanoes, waterfalls, mountains, and forests, it sprawls across more than 2,000,000 acres of Wyoming, Montana, and Idaho. Old Faithful—not so faithful in timing its eruptions anywhere from 38 to 88 minutes apart—has nonetheless performed for millions of awed spectators since an ex-soldier from the Lewis and Clark expedition, John Colter, made the first recorded visit to Yellowstone in 1807.

The story is told of a laundryman who many years ago went to Yellowstone. He saw with astonishment a bubbling pool of boiling hot water and decided to take advantage of his share of the public ownership. In went dirty clothes and soap. Soap has a disrupting effect on such pools, and it suddenly became a raging geyser. Up went clothes, laundryman, and all.

Variety is the word that describes the national parks. In them, touring Americans ride winding trails along the rim of the mighty Grand Canyon of the Colorado, camp on Maine's Mount Desert Island in Acadia National Park, and see Yosemite's towering cliffs and waterfalls (illustration, next page).

Scenic Splendors in Safe Deposit

Visitors invade a subtropical wilderness in the Everglades, climb to Crater Lake, or delve into the sculptured passageways of Carlsbad Caverns and Mammoth Cave. They stand reverently in the shadows of the giant sequoias. National parks hold America's most spectacular geography, scenic splendors in safe deposit, as it were, for the generations to come.

When a great national park closes for the season, it means usually that hotels, lodges, meal service, and transportation are no longer furnished. Few of the parks close completely to visitors in the winter; today more and more skiers, skaters, toboggan and snowshoe enthusiasts are using northern and high-altitude parks in the "off" season.

Snow lies deep and dry on the Rockies, the Cascade Range, and the High Sierras of the western parks. Usually there is little wind, and

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Hemp, hides, mercury, and boracic acid lengthen the list of products outbound from Leghorn.

Among the numerous and varied industries of Leghorn, the visitor may look in vain for the expected Leghorn hat manufacture. This fine-woven Tuscan straw (wheat straw cut green and bleached) is produced in Fiesole, a suburb of Florence, capital of Tuscany. Like "Panama" hats, made in Ecuador, Leghorn hats took their name from the port from which they were shipped.

NOTE: Livorno (Leghorn) is shown on the Society's map of Central Europe.

For further information, see "Italy Smiles Again," in the *National Geographic Magazine* for June, 1949; "Behind the Lines in Italy," July, 1944; "Italy, from Roman Ruins to Radio," March, 1940; and "Sojourning in the Italy of Today," September, 1936. See also, in the GEOGRAPHIC SCHOOL BULLETINS, April 30, 1951, "Genoa Honors Columbus on 500th Anniversary"; and "Italy's Northern Plain Is Hub of Nation," February 12, 1951.

DRAWN BY ELBERT JEROME HOWELL

ITALY'S THREE CHIEF PORTS—NAPOLI (Naples), GENOVA (Genoa), AND LIVORNO (Leghorn)—FACE WEST. LEGHORN HAS BECOME A EUROPEAN "FRONT DOOR" FOR AUSTRIA-BOUND GI'S

Bulletin No. 4, November 19, 1951

Turkey Is American Symbol of Plenty

JUST as the powerful bald eagle is the symbol of American sovereignty, so the juicy Thanksgiving turkey has come to be a national trade-mark of abundant living.

The holiday bird will march to dinner tables 53,000,000 strong this year. That figure is 16 per cent higher than last year's all-time high. Just two years ago, only 41,000,000 gobblers were raised, while in 1930 the output was a scant 18,000,000.

California (illustration, next page), Texas, and Minnesota are the leading producers of the Thanksgiving treat.

Turkeys Mature Faster

This year's 53,000,000 market-size birds will satisfy American appetites not only at the Thanksgiving and Christmas feasts of abundance, but at many non-holiday meals. They will probably provide more eating pleasure than ever before, due to advances in turkey farming.

Turkey breeders are successfully applying United States Department of Agriculture discoveries to improve the gobbler, and the current edition is broader-breasted, smaller-boned, and finer-flavored than any since the pilgrims ate their first festive turkey in 1621. Furthermore, this year's Thanksgiving bird will have matured in less time than ever before.

Grandmother's holiday turkey took nine months to grow to carving-knife status but today's bird can be brought to eating stage within seven months, due to crossbreeding of early-maturing turkeys with good meaty ones. Given time, turkey breeders expect to mature a turkey in a scant five and a half months.

In the long run, this process of maturing a turkey faster will mean more turkeys at a lower price for the average American. The advantages of speeding the birds to market-basket estate are quite plain. Not only do growing turkeys consume large amounts of expensive feed each week, but they show such an inclination toward suicide that the farmer is in constant fear of losing his flock.

Everything Frightens a Gobbler

Turkey raisers report the birds would rather stand outside and drown during a rainstorm than take shelter in sheds provided for them. This foolhardiness, combined with insatiable curiosity, has prevented many a turkey from meeting a Thanksgiving date.

One grower tells of finding six turkeys smothered to death in an empty barrel carelessly left in the turkey yard. All six had been on a tour of investigation and, once in the barrel, didn't have the sense to get out. Everything frightens a turkey, and when a flock is flying in panic it will crash into anything—barns, houses, fences—causing casualties by the hundreds.

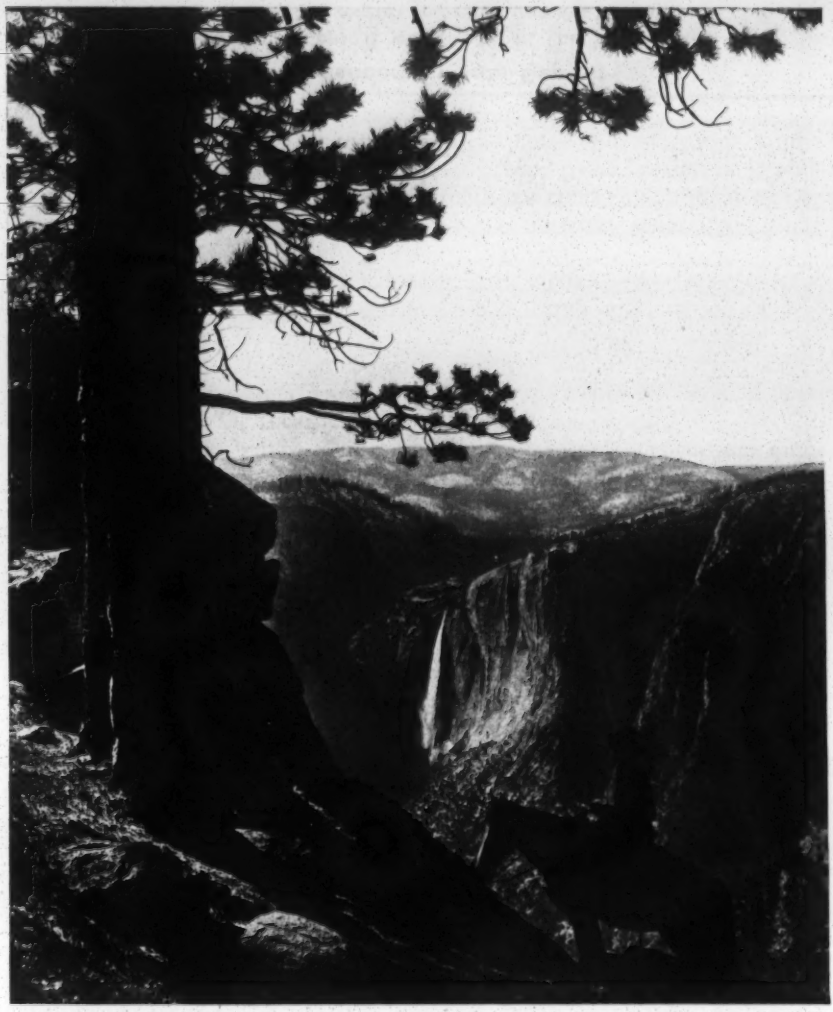
In short, the turkey is not exactly the "bird of courage" Benjamin Franklin considered it was when he nominated that all-American fowl to be the official national bird. The turkey would never, except by mistake,

temperatures are favorable for winter sports from late November until April or May. Even in Alaska's Mount McKinley National Park, all types of winter sports are available through the cold, short days of the long snow season.

NOTE: National Parks are shown on the Society's map of The United States of America.

For additional information, refer to National Parks in the *Cumulative Index to the National Geographic Magazine* in your library.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, April 23, 1951, "Earth Lets off Steam Through Geysers"; "Big Bend National Park Preserves Old West," May 8, 1950; "Teton-Jackson Hole Parks Enriched by Gifts," February 6, 1950; and "Appalachian Hikers to Hold June Jamboree," May 10, 1948.



FROM GLACIER POINT, THE RIDER SEES CALIFORNIA'S YOSEMITE FALLS PLUNGE 1,430 FEET

Below this sheer drop in Yosemite National Park, the water cascades 815 feet and then pours 320 feet over the lower fall. From rim to valley floor is nearly three-quarters of a mile—straight down.

Bulletin No. 5, November 19, 1951

Land and Water Problems Vex Israeli and Arab

BEHIND the militant disputes over the borderlands of young Israel has loomed a factor of great importance to both Jew and Arab. This factor is the nature of the land itself.

Water or its lack in the sunny, arid region east of the Mediterranean means a life-and-death difference between productive soil and wasted desert (illustration, next page).

Need for More Growing Space

At least 1,400,000 people now live within Israel's less than 8,000-square-mile area, as defined by the armistice agreements with neighboring states. Another million-odd Arabs, including some 800,000 displaced persons gathered in refugee camps, tents, and caves, are found in the near-by patchwork of Arab holdings.

Against nature's rigid limitations, Israel and the surrounding Arab states are thus faced with the need for growing more grains and fruits, and for producing more milk, eggs, meat, and wool. These foods and materials are needed to support the growing population and maintain even minimum living standards.

The border now is quiet (illustration, cover). The last outbreak, earlier this year, disturbed the north-frontier country near Lake Hule and the Sea of Galilee. There, the clashes between Israeli and Syrian elements have been halted by a United Nations-supervised truce.

In this part of the world, geographic conditions often are at the root of political disagreements. The continued activity of the Israelis in draining malaria-ridden marshes north of Lake Hule was often mentioned in dispatches as a sore point for the Arabs.

This drainage operation is an old and cherished Zionist project. The goal includes not only banishment of the malaria-carrying mosquitoes and the reclamation of some 15,000 desolate acres for productive farmland, but the eventual channeling of irrigation water for use in drier and more barren sections of the country.

Jordan Sources Lie Outside Israel

Not the least of the problems awaiting solution by the Israelis and their neighbors concerns the circumstance that several of Israel's essential rivers and streams originate outside the country.

Most of the sources of the life-giving Jordan, of Biblical fame, are found in the vicinity of the 9,000-foot giant, Mount Hermon, which towers northeast of Israel along the Lebanon-Syria border.

Only one of the Jordan's four head streams or springs starts inside Israel. This is the big spring that jets forth at the town of Dan, just inside Israel's far northeastern boundary with Syria. The Bible describes the Holy Land as extending from Dan to Beersheba.

Of the other three sources, one bubbles up at Syrian Baniyas, a little east of Dan; a second rises to the northwest in Lebanon; while the third —the long Hasbani stream which some authorities consider the real

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attack a British redcoat in the barnyard, as Franklin had said he would.

And so, the unappetizing bald eagle became the national bird, but the succulent turkey has become the symbol of plenty.

NOTE: For additional information on the turkey, see "The Bird's Year," in the *National Geographic Magazine* for June, 1951; and "Fowls of Forest and Stream Tamed by Man," March, 1930.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, November 25, 1946, "Cranberry Stands by for Thanksgiving Feast"; and "The Turkey, Native American, Was Here to Greet the Pilgrims," November 26, 1945.

WILLARD R. CULVER

A WOOD RULE MEASURES THE WHITE MEAT ON A BROAD-BREASTED GOBBLER

Turkey raising is a new industry in California's "Valley of the Moon," 40 miles north of San Francisco. One ranch raises 60,000 a year. The state leads in turkey production. Last year, California grew 6,000,000 Thanksgiving birds.

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Jordan—flows into Israel from the slopes of Mount Hermon by way of both Lebanon and Syria.

Still another important river from outside Israel is the Yarmuk, which forms a boundary between Syria and the Hashemite Kingdom of the Jordan as it flows to meet the River Jordan south of the Sea of Galilee. Near the junction of the two streams, engineers under the British Mandate built a reservoir and hydroelectric plant for the distribution of power over much of the country.

NOTE: Israel may be located on the Society's map of Asia and Adjacent Areas.

For additional information, see "Home to the Holy Land" (with 31 color photographs), in the *National Geographic Magazine* for December, 1950; "An Archeologist Looks at Palestine" and "Arab Land Beyond the Jordan" (18 color photographs), December, 1947; "Palestine Today," October, 1946; "American Fighters Visit Bible Lands," March, 1946; "Geography of the Jordan," December, 1944; "Canoeing Down the River Jordan," December, 1940; "Change Comes to Bible Lands," December, 1938; and "Bedouin Life in Bible Lands," January, 1937.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, January 22, 1951, "Jordan Administers 'Arab Palestine'"; and "New Palestine Plan Would Alter Borders," October 18, 1948.

GEORGE PICKOW—THREE LIONS

HAIFA INSTITUTE STUDENTS MEASURE WATER IN A TEST CHANNEL

Directing Israel's scant water to its many users is a constant problem in the young Mediterranean state. Much land is irrigated. Finding sources of water is another difficulty. In the Negeb, desert region of the south, water is present but it is brackish. The Weizmann Institute of Science at Rehovot has as one of its projects the economic desalting of brackish water.